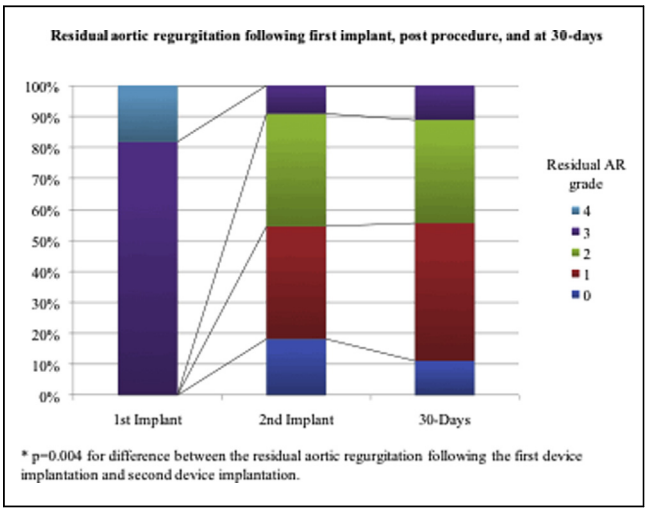
second CV implantation. AR post procedure was assessed by angiogram, echocardiography and hemodynamic indices. Clinical, imaging and procedural characteristics were recorded, and valvular function parameters were compared at baseline, post procedure, and at 30-days.

RESULTS The study cohort included 161 patients with AS who were assigned to TAVR with CV. Of these 11 (7%) patients required a second device implantation at the same procedure due to residual moderate or severe AR. The mean annular diameter in these patients was 26.7 ± 2.6 mm. Valve size of the initial valve was 31mm in 8 patients (73%), 29mm in 2 (18%) and 26mm in 1 patient (9%). Average oversizing was 14 ± 9% and severe valve calcification on CT was present in 6 patients (55%). Procedural characteristics demonstrate a low or high initial implantation in 5 (45%) and 2 (18%) of the patients, respectively. Underexpansion of the initial device was noticed in 6 (54%). The second valve size matched the first valve size in all patients. Immediately post procedure reduction in AR was noted in all but one patient, with 4 (36%) patients reaching grade 2 AR and 6 (54%) patients achieving optimal level of grade 0-1 AR (Figure). Second valve implantation was safe with no peri-procedural stroke or mortality. However, 6 (55%) patients developed acute kidney injury, 3 (27%) required pacemaker implantation and 4 (36%) developed new left bundle branch block.

CONCLUSIONS Second implantation of CV self-expanding valve for the treatment of significant residual AR is feasible and safe and associated with high immediate success rate, and should be considered as a modality for the treatment of residual moderate or severe AR after CV implantation.



CATEGORIES STRUCTURAL: Valvular Disease: Aortic

KEYWORDS Intervention, Paravalvular leak, Transcatheter aortic valve replacement

TCT-657

Post-Procedural And Follow-Up Management In Patients Undergoing Transcatheter Aortic Valve Implantation: Results From The Written (WoRldwIde TAVI ExpieNce) Survey

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BACKGROUND Transcatheter aortic valve implantation (TAVI) has been adopted worlwide, but there are still multiple areas where consensus and evidence are lacking. Post-procedural management according to the occurrence of conduction disturbances and antithrombotic treatment may vary across centers and valve types (balloon [BEV] and self-expandable [SEV] valve). The objectives of this study were to determine the real life practice related with post-TAVI management and antithrombotic treatment across different centers around the world.

METHODS From January to May 2015, an online survey was distributed worldwide in centers performing TAVI regardless the number of procedures and valve type. There was a responsible to distribute the survey in each country or region.

RESULTS A total of 167 centers (with 37843 TAVI procedures performed) responded the questionnaire from 27 different countries in Europe, North-America and South-America. Continuous ECG monitoring following TAVI was maintained during ≤24, 48 or ≥72 hours in 23%, 38% and 39% of the centers, respectively. Temporary pacemaker was removed at the end of the procedure in the absence of new conduction disturbances in 27% of patients (45% and 10% following BEV and SEV implantation, respectively). Transient A-V block occurring during valve implantation was usually not an indication for permanent pacemaker implantation for both valve types (>70%). New left bundle branch block was a frequent cause to extend temporary pacemaker indication (SEV 51%; BEV 41%), but not for permanent pacemaker implantation (<2% for both valves). Dual antiplatelet therapy was the most common antithrombotic treatment in patients without atrial fibrillation (89% of centers), with a variable duration (3 months in 44%, 6 months in 31%). In patients with atrial fibrillation, warfarin alone, warfarin+aspirin, warfarin+clopidogrel and triple therapy were given in 35%, 31%, 25% and 3% of the centers, respectively. Patients were followed in a TAVI clinic in only half (46%) of the centers.

CONCLUSIONS This survey highlights important variations in post-TAVI management according to ECG monitoring and temporary pacemaker across centers. Dual antiplatelet therapy is the most common antithrombotic treatment in the absence of other indication for anticoagulation, but antithrombotic treatment in patients with atrial fibrillation is highly variable. Future studies are needed to determine optimal post-TAVI management and follow-up.

CATEGORIES STRUCTURAL: Valvular Disease: Aortic

TCT-658

Left Bundle Branch Block and Need for Permanent Pacemaker Post TAVR

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BACKGROUND Cardiac conduction abnormalities, including left bundle branch block (LBBB), are not uncommon after TAVR. We aimed to evaluate the need for permanent pacemaker (PPM) insertion after development of new LBBB.

METHODS This is a single center study of TAVR patients. Twelve-lead ECGs were acquired pre- and immediately post procedure, during hospital stay, and at time of discharge.

RESULTS Of the 528 patients enrolled in study, 95 (18%) initially had paced rhythm and were excluded. Of the remaining 434 patients, the incidence of new LBBB was 19%, which was higher in the self-expanding Medtronic CoreValve compared to Edwards Sapien valve (Figure 1). Baseline characteristics were similar between those with and without new LBBB. The median time to development of any new conduction disease post TAVR was 0 [0, 2] day. New LBBB disappeared in 20 (30%) patients during hospital stay. The time to resolution of new LBBB was 2 [1, 5] days. Of all new LBBB, 12 (18%) progressed to complete heart block (CHB) requiring PMM implantation. Only 3 (4%) patients required PPM implantation for symptomatic new LBBB. Of all patients with new LBBB, safety outcomes at 30 days include: mortality 2 (3%), MI 0 (0%), stroke 2 (4%), and major bleeding 3 (6%). On 30-day follow-up echocardiography, patients with new LBBB had lower median [IQR] ejection fraction (EF) difference than